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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/868,907	07/09/2001	Masaharu Iwai	010879	1290

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EXAMINER

DONOVAN, LINCOLN D

ART UNIT PAPER NUMBER

2832

DATE MAILED: 01/22/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.  
09/868,907

Applicant(s)  
Iwai et al.

Examiner  
Lincoln Donovan

Art Unit  
2832



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_\_.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-3 is/are pending in the application.
- 4a) Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claims \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some\* c) ☐ None of:

- ☒ Certified copies of the priority documents have been received.
- ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
- ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\*See the attached detailed Office action for a list of the certified copies not received.

- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).
- a) ☐ The translation of the foreign language provisional application has been received.

- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

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### **DETAILED ACTION**

#### ***Priority***

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

#### ***Specification***

2. The disclosure is objected to because of the following informalities: applicant should include on page 1, preceding line 1, a related applications section stating "This application is a 371 of PCT/JP00/07811 filed 11/07/2000." Throughout the specification applicant should change the symbol for degrees from "Ω" to --- ° ---.

Appropriate correction is required.

#### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1-3 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

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Regarding claim 1, line 4, there is no antecedent basis for "joining faces." In line 5, applicant should clarify what is meant by "in this magnet roller." In lines 5-6, there is no antecedent basis for "peaks of magnetic poles." In lines 7-8, there is no antecedent basis for "the lines of extension of the joining faces." In line 13-14, there is no antecedent basis for "roller radial directions."

Regarding claim 2, there is no antecedent basis for "the angles of the orientation magnetization directions." In lines 3-4, there is no antecedent basis for "at least one set of said adjacent magnet pieces." Applicant should clarify what is meant by " $30^{\circ}$  to  $140^{\circ}$ ." It appears that applicant intended " $30^{\circ}$  to  $140^{\circ}$ ."

Regarding claim 3, there is no antecedent basis for "at least one set of said magnet pieces." Applicant should clarify the structure intended by the "at least one set of said adjacent magnet pieces are made to converge towards the outside of joining face." Applicant should clarify what is intended by "of joining face."

### ***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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6. Claims 1-3, as best able to be understood in view of the rejections under 35 U.S.C. 112, second paragraph, are rejected under 35 U.S.C. 103(a) as being unpatentable over Kan et al. (figure 8a)[US 4,557,582] in view of Kan et al. (figures 7a-7b) and Japan 2-222110.

Kan et al. discloses a magnet roller [figure 8a] comprising:

- a shaft [9]; and
- a plurality of magnet pieces [31-34] mounted at the periphery of the shaft arranged such that the directions of the orientation magnetization of adjacent magnet pieces facing joining faces thereof coincide with roller radial directions and the magnetization converging towards the outside of the joining face.

Kan et al. (figure 8a) disclose the instant claimed invention except for: the specific arrangement of the faces of the joints between the adjacent magnets.

Kan et al. (figures 7a-b) discloses the pole pieces having differing sizes changing the magnetization of the roller [figure 7a-b].

Japan 2-222110 discloses a plurality of adjacent pole faces offset from each other.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the offset design with differing sized pole pieces, as suggested by Kan et al. (figures 7a-b) and Japan 2-222110, with the magnetization pattern of Kan et al. (figure 8a), for the purpose of controlling the magnetization density.

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*Conclusion*

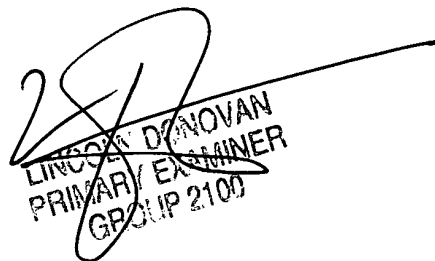
7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Lincoln Donovan whose telephone number is (703) 308-3111.

The fax number for this Group is (703)-872-9318.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-1782.

LDD

January 15, 2003

  
LINCOLN DONOVAN  
PRIMARY EXAMINER  
GROUP 2100